

Arvind Gupta: As people who have had the privilege of a good education our task is to make a fistful of soil every day...

When I found friends in India with whom I began trying to translate Soviet books for India and other countries of the Indian peninsula, my new Indian friends constantly asked me if I knew Arvind Gupta? And absolutely all my Indian friends recommended that I get to know this man. This is rather strange, considering that none of my friends knew Arvind Gupta personally.

Later, when I learned who Arvind Gupta was, I realized that this educator, who has millions of followers and students all over the world, would hardly hear my voice and would hardly notice my message among the thousands of other messages he receives daily. Arvind Gupta is a world-famous educator, engineer, scientist, creator of an entire trend in Indian education. He makes video tutorials where he shows how to make simple physical instruments for studying the laws of physics using all sorts of waste - pieces of plastic, cardboard, wire scraps, rubber soles from sandals and similar junk.

This man is also a writer, the author of 24 books in which he talks about his experience of creating toys from available materials, and a translator who translates and makes available hundreds of children's and popular science books that he has translated.

It would be very naive of me to try to attract the attention of such a person. But some time passed and Arvind Gupta himself appeared in the community of Indian lovers of Soviet literature, of which I was a member. He began to comment on my posts, I began to respond and write comments to his messages, and soon we began to collaborate and work together on translating Soviet books.

Arvind Gupta has developed a very simple and clever system for creating templates for book translations. Having created such a book template with an unchangeable layout, say in English, then it is very easy to make a book in other languages, simply replacing the English text in the template with text in another language. I have slightly modified this method and now, together with Arvind Gupta and other friends, we make digital books in English and various Indian

languages and put the files in free access in various online archives and libraries.

Now, one way or another, we communicate with Arvind Gupta almost every day, exchange information, search for books and do translations.

All this time I wanted to do an interview with this great man, but Arvind Gupta values every moment and I will hardly be able to induce him to a lengthy interview. And yet I managed to do a short interview with him, exchanging questions and answers for two months.

Evgeniy Spirin: Mr. Gupta, please tell our readers about yourself. Tell us about your childhood, about your parents, about how you lived.

Arvind Gupta: I was born in a small town of Bareilly, Uttar Pradesh – in the North Indian and most populous state of India. My father ran a small factory manufacturing washing soap. He was not good at business and always incurred losses. Sometimes we were not able to pay the electricity bill, so electricity was disconnected from our home. At other times the telephone was disconnected. My parents never went to school, but my father could read Urdu, Hindi and English. My mother could read only simple Hindi. My mother's brothers were highly educated, but in the 1930s conservative families did not send girls to school.

I was the youngest of 2 elder brothers and one sister. My mother knew that good education was the only way to secure a good future for her children. There was only one good school in our town St. Maria Goretti Convent School. It was an English medium school. So, my mother put all of us in that schools. Mother Calaso the mother superior was from Italy.

My mother never bothered me with studies. She never asked about the homework or the marks I scored. I had a small tin trunk full of tools – a broken screwdriver, a wrench punched from sheet metal with which you could fix twelve different sizes of nuts, one oil can, some grease

in a polish tin. We could not afford to buy toys from shops. So, we made our own toys using empty matchboxes, cigarette packets, polish tins etc. The whole day I would be tinkering and playing. My mother thought that I was happy and she let me be. Though she had never been to school but she intuitively understood that a child should be allowed to freely play.

Evgeniy Spirin: Please tell us what education was like in your childhood?

Arvind Gupta: I was privileged to go to an English medium school. There was 9 girls and 3 boys in my class. I opted for Advanced Math in my Senior Cambridge exam. Our Math teacher was Mrs. Frey. There were 2 more along with who opted for Advanced Math. So, we used to sit in the corridor across a square table – Mrs. Frey and the three of us. Mrs. Frey realized that I was very good at figuring out problems in Math but was poor in English (as we spoke only Hindi at home). So, she would talk to me in English for hours. This boosted my confidence and I became pretty good at English. During my exams I scored distinctions in English. For my twelfth standard (called Intermediate in India) I joined the Government Inter College, Bareilly. I had to work very hard that year – finishing 8 Math books in the course of one year. Still, I passed with distinctions and stood first in my District.

In the 1970s if one was good in studies, one went to an engineering or a medical college. I appeared for the Indian Institute of Technology (the IITs are prestigious Institutes in India). I did very well in the entrance test and went to study a 5-year course in Electrical Engineering at IIT Kanpur. IIT opened up a whole new world for me. We had excellent facilities, top notch faculty and the best of students. It was a period of intense political flux across the world – the student's uprising in Paris, the Civil Rights and Anti-Vietnam movement in America, the Naxalite and Jayprakash Movement in India. Whenever there is a political churning, it unleashes a lot of

social energy. Many people said they would not work to make missiles to kill other people. They were looking for alternate and meaningful things to do in their lives.

Evgeniy Spirin: Please remember how you got acquainted with Soviet books?

Arvind Gupta: At home there were no children's books. My family could not afford to buy story books. All I studied was from school textbooks. But in the 1960-70s there were lot of very well produced, colourful story books which were translated in many Indian languages. These books were brought to small towns in small buses and sold on the roadside. They were very low priced and very affordable. I remember reading PICTURE STORIES by Radlov. It was a fun book with no sermons or preaching. I loved the book. I haven't seen such a wonderful book like that. Many people said that Russia were flooding the Indian market with Soviet books to indoctrinate Indians with their ideology. I don't know the truth. Some of the books might have been ideological, but some by Gorky, Chekhov, Dostoevsky and Pushkin were outstanding world classics. When I was 11 years old I read MOTHER by Gorky in Hindi from my uncle's library. It had a profound effect on me. I cried bitterly. It was perhaps the first full length novel I read.

Later I read Physics for Entertainment by Yakov Perelman. I loved Perelman's books and learnt a lot about popular science from them.

Evgeniy Spirin: Please tell us how you made the journey from an engineer and scientist to an educator, the creator of an entire educational movement?

Arvind Gupta: About 200 of my engineering batch students went abroad for higher education and to have a better future. But many

stayed back in India getting jobs in top notch companies in India. I worked for two years with Tata Motors – a major truck and now a car manufacturer. The two years training was absolutely marvellous. You wore green overall and operated a lathe, shaper, did gas and electric welding and got to know all the departments of the factory. After that I was put on a mass production line which was routine, boring. Then I took a year off and went to work with Dr. Anil Sadgopal – PhD Caltech who had started the famous Hoshangabad Science Teaching Programme to make learning of science fun in village schools using low-cost activities. I spent six months there developing the Matchstick Model Mecanno using bits and cycle valve tube and many other teaching aids. For the first time I felt that I was putting my engineering training to good use.

After that I quit my job in the truck factory and devoted all my time designing simple toys, fun activities using local material to make science fun for children. I wrote my first book MATHCHSTICK MODELS AND OTHER SCIENCE MODELS in 1986. It was translated in 12 Indian languages, and six years back it was translated in Chinese. Since then I have written 24 books. Each book has been translated in 7-8 Indian languages.

I have been privileged to conduct workshops in over 3000 schools in India and twenty other countries. In 2003 I was invited to work in the Children's Science Centre of the Inter-University Centre for Astronomy and Astrophysics located in the University of Pune. I worked there from 2003 to 2014 for 11 years. That's when we started making 2-minute short films titled TOYS FROM TRASH. We had these videos dubbed into 15 languages. Today we have over 8700 videos on Youtube with over a 100 million viewers.

In 2004 I set up my website arvindguptatoys.com where we put all our books and many other educational classics free in the public domain. In 2012 in a routine test, I was diagnosed with prostate cancer. With medication I have done reasonably well. Since 2014, I

have translated over 1500 books on science, education, environment, math and great children's books in Hindi.

The educational terrain in India is very barren. There is very little soil for a young seed to blossom. As people who have had the privilege of a good education our task is to make a fistful of soil every day. This is what I try to do – translate books so that more children can read them, and make them available for free.

Conclusion.

When talking to Arvind Gupta, I periodically tell him about Soviet educators and educators, such as Semyon Kalabalin, who was a student of Anton Makarenko and continued his work, like Adrian Toporov, who founded the "May Morning" commune in Altai, where an experiment was conducted for many years to introduce ordinary peasants to the treasures of world literature, like my friend Evgeny Anninsky, who, together with his students, created an outstanding archeology museum in the small village of Podgorny near Krasnoyarsk.

I have repeatedly told Arvind Gupta about Leonid Sikoruk, an outstanding educator from Novosibirsk. I have shown his films from the "Physics for Kids" series and the "Telescopes" series filmed at the Novosibirsk television studio. Sikoruk's films were sold to 70 countries in the 1970s. Many years before Arvind Gupta's films, Leonid Sikoruk used cinematic methods to tell about studying the laws of physics using the simplest improvised means.

I was quite surprised when it turned out that Arvind Gupta knows Leonid Sikoruk's name well and considers him one of his mentors in the field of entertaining science.

Back in the 1980s, Arvind read Sikoruk's book translated into Hindi. Mr. Gupta asked me to try to find a way to pass on a short message to Leonid Sikoruk.

I found a woman on VKontakte who is almost certainly Leonid Sikoruk's daughter and sent her a message from Arvind. I did not receive a response from her.

If any of our readers have the opportunity to contact Leonid Leonidovich Sikoruk, I would like to ask you to pass on a short message from his Indian colleague and admirer.

Dear Leonid,

I wonder if my letter will reach you? I am an Indian toy developer and popularizer of science. I was deeply inspired by your book *Physics for Kids* a long time ago. I don't know if your book was translated into English, but fortunately, 40 years ago your book was translated into my native language, Hindi. Unfortunately, this book has never been reprinted.

I sincerely thank you for writing such a children's book.

I wish you good health and long life, love and peace.

Arvind Gupta.

Note.

On March 2, 2025, Soviet and Russian documentary film director, cinematographer, popularizer of science, and author of educational literature Leonid Leonidovich Sikoruk died in Novosibirsk at the age of 88.

Interviewed by: Evgeniy Spirin.